

National Weather Service

Climate Prediction Center



Site Map

News

Organization

Search

CPC Search

About Us
Our Mission
Who We Are

Contact Us
CPC Information
CPC Web Team

Official 90-day Outlooks are issued once each month near mid-month at 8:30am Eastern Time. Please consult the schedule of 30 & 90-day outlooks for exact release dates.

Text Discussions
90day Prognostic
30day Prognostic
Hawaiian
Tools

More Outlooks

0.5mn AMJ 2006 1.5mn MJJ 2006 2.5mn JJA 2006 3.5mn JAS 2006 4.5mn ASO 2006 5.5mn SON 2006 6.5mn OND 2006 7.5mn NDJ 2006 8.5mn DJF 2006 9.5mn JFM 2007 10.5mn FMA 2007 11.5mn MAM 2007 12.5mn AMJ 2007 0.5mn Apr 2006

Tools Used (see Discussion for explanation)

HOME> Outlook Maps>Seasonal Forecast Discussion

PROGNOSTIC DISCUSSION FOR LONG-LEAD SEASONAL OUTLOOKS NWS CLIMATE PREDICTION CENTER CAMP SPRINGS MD 830 AM EST THU MAR 16 2006

SUMMARY OF THE OUTLOOK FOR NON-TECHNICAL USERS

THE MAIN FACTORS WHICH USUALLY INFLUENCE SEASONAL CLIMATE INCLUDE

1) <u>EL NINO</u> AND <u>LA NINA</u> - WHICH TOGETHER MAKE UP EL NINO/SOUTHERN OSCILLATION OR

ENSO -

- 2) TRENDS THE DIFFERENCE BETWEEN THE MOST RECENT 10-YEAR MEAN OF TEMPERATURE OR 15-YEAR MEAN OF PRECIPITATION FOR A GIVEN LOCATION AND TIME OF YEAR AND THE 30-YEAR CLIMATOLOGY PERIOD (CURRENTLY 1971-2000) -
- 3) TROPICAL 30-60-DAY OSCILLATION- WHICH MAY AFFECT CLIMATE VARIABILITY WITHIN A SEASON -
- 4) THE NORTH ATLANTIC OSCILLATION OR NAO AND
- 5) PERSISTENTLY DRY OR WET SOILS IN THE SUMMER AND SNOW AND ICE COVER ANOMALIES

IN THE WINTER.

WEAK LA NINA CONDITIONS HAVE DEVELOPED DURING THE PAST FEW MONTHS... AS SST ANOMALIES IN THE CENTRAL EQUATORIAL PACIFIC BECAME INCREASINGLY NEGATIVE THROUGH JANUARY BUT HAVE NOW BOTTOMED OUT. ALTHOUGH LA NINA CONDITIONS ARE EXPECTED TO CONTINUE FOR THE NEXT THREE TO SIX MONTHS ITS EFFECT ON THE CLIMATE

OF THE NORTH AMERICAN REGION FOR THE NEXT SEASON OR TWO MAY BE WEAK.

THE TEMPERATURE OUTLOOK FOR APRIL-MAY-JUNE (AMJ) 2006 CALLS FOR WARMER-THAN-NORMAL CONDITIONS IN THE SOUTHERN U.S. FROM CALIFORNIA TO THE GULF COAST STATES. TEMPERATURES ARE EXPECTED TO

BE BELOW AVERAGE FROM WASHINGTON STATE EASTWARD AS FAR AS NORTHWESTERN MINNESOTA. ELSEWHERE THERE ARE <u>EQUAL CHANCES</u> OF WARMER- THAN... COOLER-THAN OR

NEAR-NORMAL TEMPERATURES DURING AMJ. ABOVE NORMAL TEMPERATURES ARE ANTICIPATED FOR WESTERN ALASKA AND THE NORTHWESTERN ISLANDS OF HAWAII.

THE PRECIPITATION OUTLOOK FOR AMJ CALLS FOR DRIER THAN NORMAL CONDITIONS OVER MOST OF THE SOUTHEAST AND IN THE WESTERN PORTIONS OF THE CENTRAL AND SOUTHERN PLAINS. THIS IS PRESENT TO SOME DEGREE AMONG MOST SEASONAL FORECAST TOOLS... PARTICULARLY THE <u>DYNAMICAL MODELS</u>. ABOVE MEDIAN PRECIPIATION IS EXPECTED IN AMJ IN THE WESTERN GREAT LAKES. ELSEWHERE THERE ARE <u>EQUAL CHANCES</u> OF PRECIPITATION BEING WETTER-THAN... DRIER-THAN... OR NEAR-MEDIAN DURING AMJ. ABOVE-MEDIAN PRECIPITATION IS ANTICIPATED OVER ALL ISLANDS IN HAWAII... WHILE THERE ARE NO CLEAR INDICATIONS FOR ALASKA... WHICH IS LEFT WITH <u>EQUAL CHANCES</u>.

BASIS AND SUMMARY OF THE CURRENT LONG-LEAD OUTLOOK

NOTE: FOR GRAPHICAL DISPLAYS OF THE FORECAST TOOLS DISCUSSED BELOW SEE: HTTP://WWW.CPC.NCEP.NOAA.GOV/PRODUCTS/PREDICTIONS/90DAY/TOOLS/BRIEFING

FIRSTGOV.gov

CURRENT ATMOSPHERIC AND OCEANIC CONDITIONS

THE OCEANIC AND ATMOSPHERIC INDICATORS IN THE TROPICAL PACIFIC REMAIN CONSISTENT WITH WEAK LA NINA CONDITIONS. SEA SURFACE TEMPERATURE DURING FEBRUARY WERE BELOW NORMAL BETWEEN 165E AND 115W. AT DEPTH OCEAN TEMPERATURES ARE BELOW NORMAL ACROSS THE CENTRAL AND EASTERN EQUATORIAL PACIFIC. THE WEST PACIFIC REMAINS WARM BOTH AT THE SURFACE AND AT DEPTH.

THE PATTERN OF <u>OLR</u> ACROSS THE TROPICAL PACIFIC HAS BEEN CONSISTENT WITH LA NINA

CONDITIONS SINCE NOVEMBER...WITH ENHANCED <u>CONVECTION</u> NEAR INDONESIA AND SUPPRESSED <u>CONVECTION</u> NEAR THE DATA LINE. LOW LEVEL EASTERLIES HAVE BEEN STRONG

ACROSS THE EQUATORIAL PACIFIC.

MJO ACTIVITY IS CURRENTLY EXCEEDINGLY WEAK. SSTS ARE ABOVE NORMAL IN MUCH OF THE EXTRATROPICAL NORTH ATLANTIC... ALTHOUGH SSTS SURROUNDING FLORIDA AND

THE SOUTH ATLANTIC COAST ARE WELL BELOW NORMAL.

PROGNOSTIC DISCUSSION OF SST FORECASTS

THE CONSENSUS OF SEVERAL MODELS USED AT CPC SUGGEST THAT SST ANOMALIES IN THE NINO 3.4 REGION (BETWEEN 5N AND 5S AND 170W TO 120W) HAVE PASSED THEIR MINIMUM VALUES. THE CFS AND MRK METHODS MAINTAIN AN ANOMALY BETWEEN -1.0 AND -0.5 THROUGH SUMMER 2006....SUGGESTING THE LA NINA COULD PERSIST. HOWEVER CA TURNS POSITIVE AT AROUND MAY AND CCA IS VERY CLOSE TO ZERO FOR ALL OF 2006. THE

CONSOLIDATION METHOD THUS INDICATES NINO3.4 TO MAINTAIN A SMALL NEGATIVE ANOMALY AND APPROACH ZERO ANOMALY BY LATE SUMMER.

PROGNOSTIC TOOLS USED FOR U.S. TEMPERATURE AND PRECIPITATION OUTLOOKS

THE OUTLOOK FOR AMJ 2006 THROUGH AMJ 2007 IS BASED ON THE CLIMATE MODELS... THE

MULTI-MODEL ENSEMBLE FROM IRI... THE CFS... AND CDC TOOLS BASED ON CLIMATE MODELS... AS WELL AS THE VARIOUS STATISTICAL TOOLS... INCLUDING CCA... ECCA... SMLR... OCN. THE AMJ-MJJ-JJA FORECASTS ARE INFLUENCED BY THE CONSTRUCTED ANALOGUE BASED ON SOIL MOISTURE (CAS). FORECASTS FROM AMJ THROUGH JAS 2006 REFLECT THE CONSOLIDATED TEMPERATURE PRODUCT... WHICH PRODUCES A SKILL WEIGHTED MIX OF CFS... CCA... SMLR... AND OCN. THE OUTLOOKS FOR ASO 2006 THROUGH AMJ 2007 ARE BASED ON A CONSOLIDATION OF CCA... SMLR... AND OCN... ALTHOUGH OCN IS THE PRIMARY INFLUENCE BEYOND JAS.

PROGNOSTIC DISCUSSION OF OUTLOOKS - AMJ 2006 TO AMJ 2007

TEMPERATURE:

TEMPERATURE PROBABILITIES FOR AMJ 2006 HAVE BEEN REVISED FROM THE CORRESPONDING

OUTLOOK ISSUED LAST MONTH... WITH THE OUTLOOK NOW FAVORING A MUCH LARGER AREA OF ABOVE NORMAL TEMPERATURES WITH HIGHER PROBABILITIES OVER MUCH OF THE SOUTH MAINLY BECAUSE OF DRY CONDITIONS AND SUPPORT FROM MANY TOOLS. WE EXTENDED THE AREA OF BELOW AVERAGE TEMPERATURES FROM THE DAKOTAS INTO THE PACIFIC NORTHWEST... DUE TO GOOD AGREEMENT AMONG MOST OF THE DYNAMICAL MODELS. THE OUTLOOK FOR FLORIDA WAS ALSO REVISED IN THAT PROBABILITIES FOR ABOVE WERE LOWERED DUE TO THE OBSERVED BELOW NORMAL SSTS CURRENTLY SURROUNDING THE STATE. THE OUTLOOKS FOR MJJ AND JJA 2006 WERE SLIGHTLY REVISED BY INCREASING THE AREA OF ABOVE NORMAL FROM THE SOUTHWEST AND SOUTH-CENTRAL INTO THE SOUTHEAST TO REFLECT THE LIKELIHOOD OF DROUGHT CONDITIONS CONTINUING.

INFLUENCE OF TRENDS. SOME MAPS HAVE 80-90% COVERAGE FOR ABOVE NORMAL DUE TO RECENTS UPWARDS TRENDS WHICH HAVE BEEN LARGE ESPECIALLY IN WINTER.

PRECIPITATION:

THERE IS WIDESPREAD CONSENSUS AMONG DYNAMICAL MODELS FOR BELOW MEDIAN PRECIPITATION OVER LARGE PARTS OF THE SOUTHERN THIRD OF THE CONUS FOR AMJ 2006. CCA... ECCA AND SMLR FORECASTS ALSO SUPPORT THE FORECAST FOR BELOW MEDIAN PRECIPITATION OVER PORTIONS OF THE SOUTHERN CONUS. THE STRONGEST INDICATIONS ARE IN THE SOUTH CENTRAL PLAINS BUT WE INCLUDED MUCH OF THE SOUTHEAST DUE TO MULTIPLE WEAK INDICATIONS. ABOVE MEDIAN PRECIPITATION IS FORECAST FOR THE GREAT LAKES AREA WEST INTO THE DAKOTAS. DYNAMICAL MODELS PERSIST THE DRY CONDITIONS IN PARTS OF THE SOUTHERN CONUS THROUGH SUMMER 2006... AND SHOW WETTER THAN MEDIAN CONDITIONS IN THE GREAT LAKES REGION FOR AMJ AND MJJ. INDICATIONS FOR CONTINUED DRYNESS OVER THE GREAT PLAINS FROM CAS WERE ALSO USED IN THE PRECIPITATION FORECASTS FROM AMJ THROUGH JJA 2006. A SLIGHTLY ENHANCED SUMMER MONSOON IS FORECAST FOR ARIZONA DUE TO HINTS FROM CAS... SOME OF THE DYNAMICAL MODELS... AND COMPOSITES OF SUMMERS FOLLOWING PAST

SEASONS WITH ${\color{red} LA~NINA}$ OR DEFICIENT COLD-SEASON SNOW PACK IN THE GREAT BASIN. OTHERWISE... PRECIPITATION FORECASTS FOR SEASONS BEYOND JJA... WHERE DIFFERENT

FROM EQUAL CHANCES... PRIMARILY REFLECT LONG-TERM TRENDS.

NOTE - AREAS OF UNCERTAINTY THAT FORMERLY WERE LABELED CL (CLIMATOLOGICAL PROBABILITIES) ARE NOW LABELED EC (EQUAL CHANCES).

FORECASTER: HUUG VAN DEN DOOL

STARTING WITH THE SEASONAL OUTLOOK RELEASED IN FEBRUARY, 2006, THE GLOSSARY OF TERMS WILL NO LONGER APPEAR WITH THIS MESSAGE.

INSTEAD, TERMS THAT ARE IN THE GLOSSARY WILL BE LINKED TO THEIR DEFINITION.

FOR A DESCRIPTION OF THE STANDARD FORECAST TOOLS - THEIR SKILL - AND THE FORECAST FORMAT PLEASE SEE OUR WEB PAGE AT

HTTP://WWW.CPC.NCEP.NOAA.GOV/PRODUCTS/PREDICTIONS/90DAY/DISC.HTML (USE LOWER CASE LETTERS)

INFORMATION ON THE FORMULATION AND SKILL OF THE <u>CAS</u> FORECASTS MAY BE FOUND AT: HTTP://WWW.CPC.NCEP.NOAA.GOV/SOILMST/FORECASTS.HTML (USE LOWERCASE LETTERS)

NOTES - THESE CLIMATE OUTLOOKS ARE INTENDED FOR USE PRIOR TO THE START OF THEIR VALID PERIOD. WITHIN ANY GIVEN VALID PERIOD OBSERVATIONS AND SHORT AND MEDIUM RANGE FORECASTS SHOULD BE CONSULTED.

THIS SET OF OUTLOOKS WILL BE SUPERSEDED BY THE ISSUANCE OF THE NEW SET NEXT MONTH ON THU APR 20 2006.

1971-2000 BASE PERIOD MEANS WERE IMPLEMENTED EFFECTIVE WITH THE MAY 17, 2001 FORECAST RELEASE